No. 786,957. PATENTED APR. 11, 1905.

C. A. CRANE.

CAN COVER.

APPLICATION FILED SEPT. 12, 1904

FIG. 1.

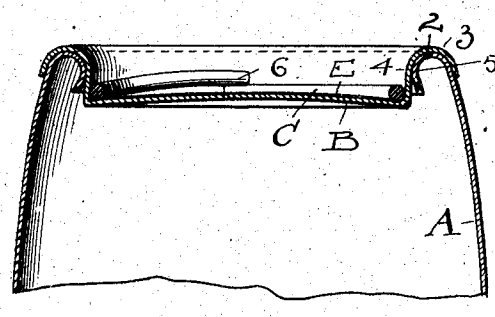


FIG. 2.

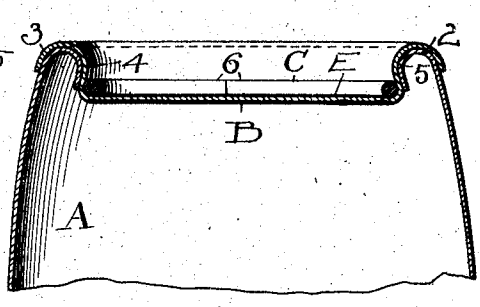


FIG. 3.

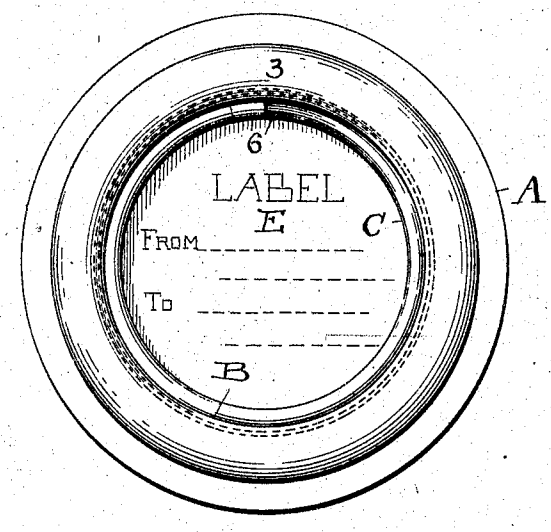
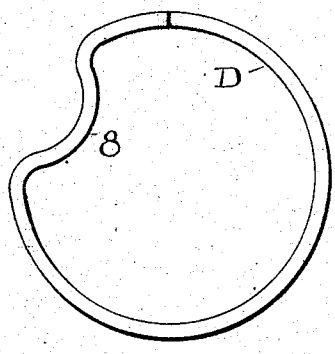


FIG. 4.



WITNESSES:

A. M. Moser

R. B. Moser

INVENTOR.

Clarence A. Crane

BY H. J. Fisher

ATTORNEY.

No. 786,957. Patented April 11, 1905.

UNITED STATES PATENT OFFICE.

CLARENCE A. CRANE, OF WARREN, OHIO.

CAN-COVER.

SPECIFICATION forming part of Letters Patent No. 786,957, dated April 11, 1905.

Application filed September 12, 1904. Serial No. 224,220.

To all whom it may concern.

Be it known that I, CLARENCE A. CRANE, a citizen of the United States, residing at Warren, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Can-Covers; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in can-covers; and the invention consists in a can-cover and locking-ring therefor, all substantially as hereinafter shown and described and more particularly pointed out in the claims.

My object is to provide a simple and practical locking-fastener for can-covers which is especially adapted for use with metallic cans, such as paint-kegs, wherein excessive weights or pressures from within must be borne and withstood.

I also aim to provide a fastener which can be readily removed with any suitable instrument without injury to the cover.

In the accompanying drawings, Figure 1 is a sectional elevation of the upper portion of a can with a cover thereon and with a fastening-ring in place and as it appears before it is spread; and Fig. 2 is a similar view, but with the ring expanded and the cover locked upon the can. Fig. 3 is a plan view of the can and cover and fastener as shown in Fig. 1. Fig. 4 is a plain elevation of a modified form of fastening-ring.

The can or vessel shown has a cylindrical body A with an upper open end and with an annular inturned rounded edge 2. In a metallic can this form of edge is preferred, but not entirely essential.

Cover B is concave or cup-shaped, with an annular outwardly-flaring and rounded flange 3, which is adapted to seat snugly upon edge 2 of the can, and with the inner walls 4 of the cover fitting closely to the inner rounded face 5 of edge or seat 2. Wall 4 of cover B projects somewhat below edge 2 of the can, and when said wall is pressed outward or expanded its diameter will slightly exceed that of the smallest inner diameter of the rounded edge or seat 2 of the can. If this be done, it will in itself serve in a measure as a lock for the can-cover; but the cover could be readily released by prying or forcing the cover upward. To the end that this increase in diameter of wall 4 of the cover may be had and also that an effective lock be provided to hold the cover firmly in place at all times I place a split ring C, of heavy wire, within and upon the bottom of the cover, and said ring is of larger diameter than the inner portion of the cover, but contracted and with its ends 6 overlapping each other to permit this to be done. Then by means of a suitable press or former said ring C is expanded uniformly throughout its length until the ends 6 come into abutting relation, as seen in Fig. 2. Thereafter both ring C and cover B are locked and can only be removed one at a time by suitable instruments adapted to pry first the ring and then the cover from their seats. The same locking effect and arrangement may be obtained by the use of a ring D, having an inward offset, crimp, or corrugation 8 or a series of such offsets or corrugations, which when pressed outward will expand the ring and increase its diameter sufficiently to embed itself within the wall of the cover and also press said wall outward to lock the cover upon the can. Ring C can also be used to hold down a suitable label E upon the bottom of the cover and which may be removed when the ring is removed.

The net effect of the construction of the can as above described is to provide an inner seat over which the can-cover is drawn tightly and sealed against leakage and is provided with an inturned edge or portion against and beneath which the cover is expanded and locked by the expanding ring D. By having said ring come in respect to said inturned edge or portion 8 relatively, as seen in Fig. 2, a drawing-down effect is produced on the wall of the cover which seals it closely upon the said seat.

What I claim is—

1. A can or vessel having its upper edge rolled inside, a cover fitting within and over said rolled edge and an expanded ring holding the cover to the can or vessel.

2. A can or vessel having its upper end formed inside with a seat for a cover and said

seat having an inturned portion about its bottom, a cover having a wall fitting within and over said seat, and an expanded ring locking the cover against said inturned portion.

3. A can or vessel having a seat for a cover provided with an annular inturned portion at the bottom of the seat, a cover fitting within said seat and extending beneath said inturned portion, and an expanded ring in the base of said cover on a plane partly beneath the said inturned portion and engaging the cover on the can or vessel.

4. A can or vessel having an inturned portion inside about its top, a cover having a wall engaged over and within the said top and having a bead engaging the edge of said inturned portion, and an expanded ring in the base of the cover locked in the annular channel of said bead.

5. A can or vessel having a narrowed inner portion apart from the outer wall of the vessel, a cover having a wall fitting within and over said narrowed inner portion and provided with an annular enlargement about its base, and a ring expanded in said annular enlargement and thereby locking the cover on the can.

6. A can or vessel having a seat for a cover provided with an inturned portion, a cover with a wall engaged within and over said seat, and a split ring expanded in the said cover and holding the same against said inturned portion.

7. A can or vessel having its upper edge rolled inside, a cover fitting within and over said rolled edge and enlarged about its base substantially at the edge of said rolled portion, and a split ring expanded in said enlarged portion and having its ends abutting.

8. A can or vessel provided with an inner portion at its top forming a seat for a cover, a cover having a wall fitting within and over said seat, and a split ring seated in the bottom of said cover on a plane partially beneath the lower edge of said inner portion of the can or vessel top.

9. A can or vessel having a seat inside for a cover, in combination with a cover having a wall fitting within and over said seat and a split ring in the bottom of said cover having its ends overlapping, whereby when the ring is expanded its ends abut and the cover is sealed and locked on the can.

In testimony whereof I sign this specification in the presence of two witnesses.

CLARENCE A. CRANE.

Witnesses:

H. T. FISHER,

R. B. MOSER.